

**DETAILED ACTION**

***Examiner's Amendment***

1. In view of the fact that this application is in condition for allowance except for the presence of Group II directed to a design or designs nonelected without traverse in the reply filed on January 18, 2008, and without the right to petition such Group(s) have been cancelled.

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Claims 23 - 26 (canceled).

***Allowable Subject Matter***

2. Claims 1, 28 - 32, 38 - 39, 41 - 42, 46 – 49 & 52 - 55 are allowed.

The following is an examiner's statement of reasons for allowance:

The instant application claim 1 contains the following limitation:

"...wherein there are voids as stress release portions at least partially between said peripheral wall layer and said grooves, and wherein the number of grooves having said voids is 7% or more of the total number of the grooves".

These limitations yield unexpected results, specifically an unexpected coefficient of thermal expansion based upon the teachings of the prior art, and therefore are not obvious over the prior art. Horikawa discloses a honeycomb structure suggesting a peripheral wall made with a material of lower viscosity than used by Applicant to obtain 7% or more voids in the grooves. Horikawa discourages increasing the viscosity of the material for forming the peripheral wall to the point of forming voids 7% or more voids. Therefore, based on the nearest prior art, one would not expect a honeycomb structure comprising grooves having 7% or more voids based on the total number of grooves to lower the coefficient of thermal expansion compared to a honeycomb structure without this feature.

Claims 28 – 32, 47 & 49 are dependent upon claim 1 and therefore also allowed.

Claims 38 – 39, 41 – 42 & 52 - 53 were indicated to be allowable in the office action dated June 9, 2009 if amended to overcome the rejection under 35 U.S.C. §112, second paragraph. These claims have been amended and thus the rejection is withdrawn. Claims 38 – 39, 41 – 42 & 52 - 53 are allowable over the prior art because the prior art failed to disclose a peripheral wall comprising 100 parts by mass of amorphous silica and 2 to 35 parts by mass of amorphous oxide matrix, wherein said amorphous silica has a thermal expansion coefficient of  $10.0 \times 10^{-7}/^{\circ}\text{C}$  or less. Claims 46, 48 & 54 are dependent on claim 38. Claim 55 is dependent upon claim 52. Therefore these claims are also allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICOLE T. GUGLIOTTA whose telephone number is (571)270-1552. The examiner can normally be reached on M - F 8:30 a.m. - 6 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Sample can be reached on 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David R. Sample/  
Supervisory Patent Examiner, Art Unit 1794

/NICOLE T GUGLIOTTA/  
Examiner, Art Unit 1794